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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,944	06/04/2001	Shunpei Yamazaki	12732-048001	2529

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EXAMINER

LEE, HSIEN MING

ART UNIT PAPER NUMBER

2823

DATE MAILED: 06/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/871,944

Applicant(s)

YAMAZAKI ET AL.

Examiner

Hsien-Ming Lee

Art Unit

2823

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 5-7, 9, 11, 12 and 31 is/are rejected.
- 7) ☒ Claim(s) 1-6, 8, 10, 13-30 and 32 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

Hsien-Ming Lee

5/27/05

DETAILED ACTION

Claim Objections

1. Claims 1-6 are objected to because of the following informalities: changing "the second conductive film" (claim 1, lines 11, 13-14; claim 2, lines 10-11 on page 52; claim 3, lines 5 and 7-8 on page 53; claim 4, lines 4-5 on page 54; claim 5, line 23 on page 54 and line 1-2 on page 55; claim 6, lines 20 and 22-23 on page 55) and "the second gate electrode" (claim 1, line 18; claim 5, line 6 on page 55 and claim 6, line 3 on page 56) into -- the second conductive film **as a mask** -- and -- the second gate electrode **as a mask** --, respectively, are suggested for clarity.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3, 5, 6, 7, 9, 11, 12 and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Ohtani (US 6,277,679).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

In re claims 1, 3, 5, 6 and 31, Ohtani, in Figs. 3A-3E, 4A-4C and related text, teaches the claimed method of fabricating an electrical appliance (i.e. a video camera as shown in Fig. 8B) having a light emitting device which has at least one thin film transistor in a pixel portion (col. 20, lines 7-9) and a driver circuit formed over a same substrate (col. 1, lines 17-21), comprising the steps of:

- forming a semiconductor film 203 (i.e. polysilicon) on an insulator 201 (i.e. silicon oxide);
- forming a gate insulating film 207 covering the semiconductor film 203;
- forming a first conductive film 208 (i.e. silicon) and a second conductive film 209 (i.e. Ta) on the gate insulating film 207 (Fig. 3C);
- forming an electrode 211b made of the second conductive film by etching the second conductive film (Fig. 3D);
- adding an n-type impurity element to the semiconductor film 203 to form impurity regions 215 and 216 by self-alignment using the electrode 211b made of the second conductive film as a mask (Fig. 3E);
- forming an electrode 211a made of the first conductive film by etching the first conductive film by self-alignment using the electrode 211b made of the second conductive film as a mask;
- forming a second gate electrode 218b by narrowing a line width of the electrode 211b made of the second conductive film by etching (Figs. 4A-4B);

- adding an n-type impurity element to the semiconductor film 203 to form another impurity regions 223 and 224 by self-alignment using the second gate electrode 218b as a mask (Fig. 4C); and
- forming a first gate electrode 218a by narrowing a line width of the electrode 211a made of the first conductive film by etching (Figs. 4A-4B).

In re claims 7, 9, 11 and 12, Ohtani also teaches that an n-type impurity region (a) (i.e. 215 and 216) is formed at the former adding step, an n-type impurity region (b) (i.e. 223 and 224) is formed at the latter adding step.

Double Patenting

4. Claims 3, 5 and 6 are objected to under 37 CFR 1.75 as being a substantial duplicate of claim 1. When two claims in an application are duplicates or else are so close in content that they both cover the same thing (i.e. the entire claim body is identical), despite a slight difference in wording (i.e. the only slight difference among claims 1, 3, 5 and 6 is the preamble, which does not carry patentable weight when the entire claim body does not refer back to the preamble or the preamble does not limit the claim body. See M.P.E.P. 2111.02), it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

(Note) M.P.E.P. 2111.02 states that "If the body of a claim fully and intrinsically sets forth all of the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention's limitations, then the preamble is not considered a limitation and is of no significance to claim construction."

Allowable Subject Matter

5. Claims 13, 15, 17-19, 21, 23-25, 27, 29 and 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. Claims 2 and 4 would be allowable if rewritten or amended to overcome the objection as set forth in this Office action.
7. Claims 8, 10, 14, 16, 20, 22, 26, 28 and 32 are objected to as being dependent upon a objected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
8. The following is a statement of reasons for the indication of allowable subject matter:
None of the prior art of the record teaches or suggests that a part of the n-type impurity region (a) *overlaps* the first gate electrode through the gate insulating film (claims 13-18); the first conductive film is a *tantalum nitride* film and the second conductive film is a *tungsten* film (claims 19-24); the first conductive film is a *tungsten* film and the second conductive film is an *aluminum alloy* film (claims 25-30); and adding an n-type impurity element to the semiconductor film by making the n-type impurity element *pass through the electrode made of the first conductive film* (claims 2 and 4).
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hsien-Ming Lee whose telephone number is 571-272-1863. The examiner can normally be reached on M-F (9:00 ~ 5:00).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Olik Chaudhuri can be reached on 571-272-1855. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hsien-Ming Lee
Primary Examiner
Art Unit 2823

May 27, 2004

Hsien-Ming Lee
5/27/2004